

Applicants : Todd W. Pastrick et al.  
Page : 5

IN THE CLAIMS:

Please cancel Claims 1-87. Please add the following new Claims:

1-87. (cancelled)

88. (new) A mirror assembly security system suitable for use in a vehicle comprising:

- an exterior mirror assembly including a reflective element and a positioning device for adjustably positioning said reflective element;

- a light module positioned substantially within said assembly;

- said light module including an enclosure having a light-transmitting opening, said light-transmitting opening generally facing downward when said exterior mirror assembly is mounted to a side of the vehicle;

- said light module including a light source and including a light-directing surface;

- said light module projecting a pattern of light from a bottom portion of said assembly to illuminate a ground area adjacent the vehicle in order to create a lighted security zone when said light source is electrically powered;

- a light transmitting cover for said light-transmitting opening;

- said light transmitting cover comprising a lens;

- said light module configured to direct light downward and rearward of the vehicle when said exterior mirror assembly is mounted to a side of the vehicle and when said light source is electrically powered; and

- wherein said lens comprises at least one non-planar optical surface.

89. (new) The mirror assembly security system of claim 88, wherein said light-directing surface at least partially surrounds said light source.

90. (new) The mirror assembly security system in claim 89, further comprising a socket, said enclosure including a second opening, said socket being positioned in said second opening in said enclosure and including sealing means for sealing said socket in said second opening whereby said light source can be replaced by removing said light module from said exterior mirror assembly and removing said socket from said light module.

91. (new) The mirror assembly security system in claim 88, wherein said at least one non-planar optical surface comprises two non-planar optical surfaces.

92. (new) The mirror assembly security system in claim 88, wherein said light-directing surface is configured to direct light generally along a given axis, said axis generally facing downwardly and rearwardly of the vehicle.

93. (new) The mirror assembly security system in claim 89, wherein said enclosure is at least partially disposed in said exterior mirror assembly behind said reflective element.

94. (new) The mirror assembly security system in claim 88, wherein said lens comprises a refractive optic lens.

95. (new) The mirror assembly security system in claim 88, wherein said lens comprises a lens selected from the group consisting of a diffusive optic lens, a diffractive optic lens, a refractive optic lens, a reflective optic lens, a holographic optic lens, a binary optic lens, a clear optic lens, and a sinusoidal optic lens.

96. (new) The mirror assembly security system in claim 89, wherein said exterior mirror assembly and said enclosure include mating surface configurations, said mating surface configurations cooperating to at least partially retain said enclosure in said exterior mirror assembly.

97. (new) The mirror assembly security system in claim 96, wherein said mating surface configurations comprise a tongue-and-groove configuration.

98. (new) The mirror assembly security system in claim 96, wherein said mating surface configurations comprise at least one pair of deflectable prongs on one of said exterior mirror assembly and said enclosure and a socket on the other of said exterior mirror assembly and said enclosure, said deflectable prongs snap-fitting with said socket.

99. (new) The mirror assembly security system in claim 96, wherein said mating surface configurations include at least one guide member and a deflectable clip on one of said exterior mirror assembly and said enclosure and a doghouse connector on the other of said exterior mirror assembly and said enclosure, said guide member and clip being retained by said doghouse connector.

100. (new) The mirror assembly security system in claim 89, wherein said enclosure is made from a heat-resistant polymer.

101. (new) The mirror assembly security system of claim 100, wherein said polymer has a heat distortion temperature of at least approximately 80° C.

102. (new) The mirror assembly security system in claim 100, wherein said polymer is selected from the group consisting of polycarbonate, polyester, nylon, and ABS.

103. (new) The mirror assembly security system in claim 88, wherein said light-directing surface comprises a metallic reflector surface.

104. (new) The mirror assembly security system of claim 88, wherein said exterior mirror assembly comprises a driver-side exterior mirror assembly.

105. (new) The mirror assembly security system of claim 89, wherein said reflective element comprises an electro-optic mirror.

106. (new) The mirror assembly security system of claim 105, wherein said electro-optic mirror comprises an electrochromic mirror.

107. (new) The mirror assembly security system of claim 106, wherein said electrochromic mirror comprises an electrochemichromic mirror.

Applicants : Todd W. Pastrick et al.  
Page : 8

108. (new) The mirror assembly security system of claim 90, wherein said sealing means comprises a polymer material having a durometer hardness of at least about 50 SHORE A.

109. (new) The mirror assembly security system of claim 108, wherein said sealing means comprises a polymer material having a durometer hardness in a range of from about 50 to about 95 SHORE A.

110. (new) The mirror assembly system of claim 90, wherein said socket is at least partially formed of a resilient polymer material so as to be self-gasketing at its mating surface to said enclosure.

111. (new) The mirror assembly security system of claim 88, wherein said light module is inserted within said exterior mirror assembly through an opening in said bottom portion of said exterior mirror assembly.

112. (new) The mirror assembly security system of claim 111, wherein said light module is positioned within said exterior mirror assembly in a manner that conforms to the styling and aerodynamic lines of said exterior mirror assembly.

113. (new) The mirror assembly security system of claim 89, wherein said light module is inserted within said exterior mirror assembly through an opening in said bottom portion of said exterior mirror assembly.

114. (new) The mirror assembly security system of claim 113, wherein said exterior mirror assembly includes a wall, said cover of said light module being substantially flush with said wall of said exterior mirror assembly.

115. (new) The mirror assembly security system of claim 113, wherein said light module is removably attached by an attachment system.

116. (new) The mirror assembly security system of claim 115, wherein said attachment

Applicants : Todd W. Pastrick et al.  
Page : 9

system comprises a fastenerless system.

117. (new) The mirror assembly security system of claim 116, wherein said fastenerless system comprises a doghouse style receiving connector.

118. (new) The exterior rearview mirror system of claim 113, wherein said light module is removably attached using at least one fastener.

119. (new) The exterior rearview mirror system of claim 118, wherein said at least one fastener comprises a member selected from the group consisting of a screw, a clasp, a latch, and a clip.

120. (new) The exterior rearview mirror system of claim 118, wherein said at least one fastener comprises a screw.

121. (new) The exterior rearview mirror system of claim 115, wherein said light module is removably attached using no more than two fasteners.

122. (new) The exterior rearview mirror system of claim 121, wherein said no more than two fasteners are selected from the group consisting of screws, clasps, latches, and clips.

123. (new) The exterior rearview mirror system of claim 121, wherein said no more than two fasteners comprise at least one screw.

124. (new) The exterior rearview mirror system of claim 123, wherein said no more than two fasteners comprise two screws.

125. (new) The mirror assembly security system of claim 89, wherein said light module is inserted within said exterior mirror assembly through an opening in said bottom portion of said exterior mirror assembly.

Applicants : Todd W. Pastrick et al.  
Page : 10

126. (new) The mirror assembly security system of claim 125, wherein said exterior mirror assembly includes a wall, said cover of said light module being substantially flush with said wall of said exterior mirror assembly.

127. (new) The mirror assembly security system of claim 88, wherein said enclosure includes first and second side walls and first and second electrical contacts, said first contact disposed on said first side wall, said second contact disposed on said second side wall and said contacts supporting said light source and for electrically coupling said light source to an external electrical power supply.

128. (new) The mirror assembly security system of claim 127, wherein said light source comprises an elongated light radiating surface.

129. (new) The mirror assembly security system of claim 127, wherein said light source comprises an incandescent light source.

130. (new) The mirror assembly security system of claim 129, wherein said light source comprises an incandescent festoon light source.

131. (new) The mirror assembly security system of claim 89, wherein said light module is removable from said exterior mirror assembly as a unit.

132. (new) The mirror assembly security system of claim 89, wherein said enclosure has a volume that is less than approximately 100 cubic centimeters.

133. (new) The mirror assembly security system of claim 89, wherein said ground area is illuminated with a light level less than approximately 40 lux.

134. (new) The mirror assembly security system of claim 88, wherein said ground area is illuminated with a light level greater than approximately 10 lux.

135. (new) The mirror assembly security system of claim 134, wherein said ground area is illuminated with a light level in the range of approximately 10 lux to approximately 40 lux.

136. (new) A mirror assembly security system suitable for use in a vehicle comprising:  
an exterior mirror assembly including a reflective element and a positioning device for adjustably positioning said reflective element;  
a light module positioned substantially within said assembly;  
said light module including an enclosure having a light-transmitting opening, said light-transmitting opening generally facing downward when said exterior mirror assembly is mounted to a side of the vehicle;  
said light module including a light source and including a light-directing surface;  
said light module projecting a pattern of light from a bottom portion of said assembly to illuminate a ground area adjacent the vehicle in order to create a lighted security zone when said light source is electrically powered;  
a light transmitting cover for said light-transmitting opening;  
said light transmitting cover comprising a lens;  
said light module configured to direct light downward and rearward of the vehicle when said exterior mirror assembly is mounted to a side of the vehicle and when said light source is electrically powered;  
wherein said lens comprises at least one non-planar optical surface;  
wherein said light module is removable from said exterior mirror assembly as a unit;  
and  
wherein said light-directing surface at least partially surrounds said light source.

137. (new) The mirror assembly security system of claim 136, wherein said light-directing surface comprises a metallic reflector surface.

138. (new) The mirror assembly security system in claim 137, further comprising a socket, said enclosure including a second opening, said socket being positioned in said second opening in said enclosure and including sealing means for sealing said socket in said second opening whereby said light source can be replaced by removing said light module from said

exterior mirror assembly and removing said socket from said light module.

139. (new) The mirror assembly security system in claim 136, wherein said at least one non-planar optical surface comprises two non-planar optical surfaces.

140. (new) The mirror assembly security system in claim 136, wherein said light-directing surface is configured to direct light generally along a given axis, said axis generally facing downwardly and rearwardly of the vehicle.

141. (new) The mirror assembly security system in claim 137, wherein said enclosure is at least partially disposed in said exterior mirror assembly behind said reflective element.

142. (new) The mirror assembly security system in claim 136, wherein said lens comprises a refractive optic lens.

143. (new) The mirror assembly security system in claim 136, wherein said lens comprises a lens selected from the group consisting of a diffusive optic lens, a diffractive optic lens, a refractive optic lens, a reflective optic lens, a holographic optic lens, a binary optic lens, a clear optic lens, and a sinusoidal optic lens.

144. (new) The mirror assembly security system in claim 137, wherein said exterior mirror assembly and said enclosure include mating surface configurations, said mating surface configurations cooperating to at least partially retain said enclosure in said exterior mirror assembly.

145. (new) The mirror assembly security system in claim 144, wherein said mating surface configurations comprise a tongue-and-groove configuration.

146. (new) The mirror assembly security system in claim 144, wherein said mating surface configurations comprise at least one pair of deflectable prongs on one of said exterior mirror assembly and said enclosure and a socket on the other of said exterior mirror assembly and



Applicants : Todd W. Pastrick et al.  
Page : 13

said enclosure, said deflectable prongs snap-fitting with said socket.

147. (new) The mirror assembly security system in claim 144, wherein said mating surface configurations include at least one guide member and a deflectable clip on one of said exterior mirror assembly and said enclosure and a doghouse connector on the other of said exterior mirror assembly and said enclosure, said guide member and clip being retained by said doghouse connector.

148. (new) The mirror assembly security system in claim 137, wherein said enclosure is made from a heat-resistant polymer.

149. (new) The mirror assembly security system of claim 148, wherein said polymer has a heat distortion temperature of at least approximately 80° C.

150. (new) The mirror assembly security system in claim 148, wherein said polymer is selected from the group consisting of polycarbonate, polyester, nylon, and ABS.

151. (new) The mirror assembly security system in claim 143, wherein said light-directing surface comprises a metallic reflector surface.

152. (new) The mirror assembly security system of claim 136, wherein said exterior mirror assembly comprises a driver-side exterior mirror assembly.

153. (new) The mirror assembly security system of claim 137, wherein said reflective element comprises an electro-optic mirror.

154. (new) The mirror assembly security system of claim 153, wherein said electro-optic mirror comprises an electrochromic mirror.

155. (new) The mirror assembly security system of claim 154, wherein said electrochromic mirror comprises an electrochemichromic mirror.

156. (new) The mirror assembly security system of claim 138, wherein said sealing means comprises a polymer material having a durometer hardness of at least about 50 SHORE A.

157. (new) The mirror assembly security system of claim 156, wherein said sealing means comprises a polymer material having a durometer hardness in a range of from about 50 to about 95 SHORE A.

158. (new) The mirror assembly system of claim 138, wherein said socket is at least partially formed of a resilient polymer material so as to be self-gasketing at its mating surface to said first enclosure.

159. (new) The mirror assembly security system of claim 136, wherein said light module is inserted within said exterior mirror assembly through an opening in said bottom portion of said exterior mirror assembly.

160. (new) The mirror assembly security system of claim 159, wherein said light module is positioned within said exterior mirror assembly in a manner that conforms to the styling and aerodynamic lines of said exterior mirror assembly.

161. (new) The mirror assembly security system of claim 137, wherein said light module is inserted within said exterior mirror assembly through an opening in said bottom portion of said exterior mirror assembly.

162. (new) The mirror assembly security system of claim 161, wherein said exterior mirror assembly includes a wall, said cover of said light module being substantially flush with said wall of said exterior mirror assembly.

163. (new) The mirror assembly security system of claim 161, wherein said light module is removably attached by an attachment system.

Applicants : Todd W. Pastrick et al.  
Page : 15

164. (new) The mirror assembly security system of claim 163, wherein said attachment system comprises a fastenerless system.

165. (new) The mirror assembly security system of claim 164, wherein said fastenerless system comprises a doghouse style receiving connector.

166. (new) The exterior rearview mirror system of claim 161, wherein said light module is removably attached using at least one fastener.

167. (new) The exterior rearview mirror system of claim 166, wherein said at least one fastener comprises a member selected from the group consisting of a screw, a clasp, a latch, and a clip.

168. (new) The exterior rearview mirror system of claim 166, wherein said at least one fastener comprises a screw.

169. (new) The exterior rearview mirror system of claim 163, wherein said light module is removably attached using no more than two fasteners.

170. (new) The exterior rearview mirror system of claim 169, wherein said no more than two fasteners are selected from the group consisting of screws, clasps, latches, and clips.

171. (new) The exterior rearview mirror system of claim 169, wherein said no more than two fasteners comprise at least one screw.

172. (new) The exterior rearview mirror system of claim 171, wherein said no more than two fasteners comprise two screws.

173. (new) The mirror assembly security system of claim 137, wherein said light module is inserted within said exterior mirror assembly through an opening in said bottom portion of said exterior mirror assembly.

174. (new) The mirror assembly security system of claim 173, wherein said exterior mirror assembly includes a wall, said cover of said light module being substantially flush with said wall of said exterior mirror assembly.

175. (new) The mirror assembly security system of claim 136, wherein said enclosure includes first and second side walls and first and second electrical contacts, said first contact disposed on said first side wall, said second contact disposed on said second side wall and said contacts supporting said light source and for electrically coupling said light source to an external electrical power supply.

176. (new) The mirror assembly security system of claim 175, wherein said light source comprises an elongated light radiating surface.

177. (new) The mirror assembly security system of claim 175, wherein said light source comprises an incandescent light source.

178. (new) The mirror assembly security system of claim 177, wherein said light source comprises an incandescent festoon light source.

179. (new) The mirror assembly security system of claim 136, wherein said enclosure has a volume that is less than approximately 100 cubic centimeters.

180. (new) The mirror assembly security system of claim 137, wherein said enclosure has a volume that is less than approximately 70 cubic centimeters.

181. (new) The mirror assembly security system of claim 137, wherein said ground area is illuminated with a light level less than approximately 40 lux.

182. (new) The mirror assembly security system of claim 136, wherein said ground area is illuminated with a light level greater than approximately 10 lux.

183. (new) The mirror assembly security system of claim 182, wherein said ground area is illuminated with a light level in the range of approximately 10 lux to approximately 40 lux.

184. (new) A mirror assembly security system suitable for use in a vehicle comprising:  
an exterior mirror assembly including a reflective element and a positioning device for adjustably positioning said reflective element;  
a light module positioned substantially within said assembly;  
said light module including an enclosure having a light-transmitting opening, said light-transmitting opening generally facing downward when said exterior mirror assembly is mounted to a side of the vehicle;  
said light module including a light source and including a light-directing surface;  
said light module projecting a pattern of light from a bottom portion of said assembly to illuminate a ground area adjacent the vehicle in order to create a lighted security zone when said light source is electrically powered;  
a light transmitting cover for said light-transmitting opening;  
said light transmitting cover comprising a lens;  
said light module configured to direct light downward and rearward of the vehicle when said exterior mirror assembly is mounted to a side of the vehicle and when said light source is electrically powered;  
wherein said lens comprises a lens selected from the group consisting of a diffusive optic lens, a diffractive optic lens, a refractive optic lens, a reflective optic lens, a holographic optic lens, a binary optic lens, a clear optic lens, and a sinusoidal optic lens; and  
wherein said enclosure has a volume that is less than approximately 100 cubic centimeters.

185. (new) The mirror assembly security system of claim 184, wherein said light-directing surface comprises a metallic reflector surface.

186. (new) The mirror assembly security system in claim 185, further comprising a socket, said enclosure including a second opening, said socket being positioned in said second

Applicants : Todd W. Pastrick et al.  
Page : 18

opening in said enclosure and including sealing means for sealing said socket in said second opening whereby said light source can be replaced by removing said light module from said exterior mirror assembly and removing said socket from said light module.

187. (new) The mirror assembly security system in claim 184, wherein said lens comprises two non-planar optical surfaces.

188. (new) The mirror assembly security system in claim 184, wherein said light-directing surface is configured to direct light generally along a given axis, said axis generally facing downwardly and rearwardly of the vehicle.

189. (new) The mirror assembly security system in claim 185, wherein said enclosure is at least partially disposed in said exterior mirror assembly behind said reflective element.

190. (new) The mirror assembly security system in claim 184, wherein said lens comprises a refractive optic lens.

191. (new) The mirror assembly security system in claim 184, wherein said lens comprises at least one non-planar optical surface.

192. (new) The mirror assembly security system in claim 185, wherein said exterior mirror assembly and said enclosure include mating surface configurations, said mating surface configurations cooperating to at least partially retain said enclosure in said exterior mirror assembly.

193. (new) The mirror assembly security system in claim 192, wherein said mating surface configurations comprise a tongue-and-groove configuration.

194. (new) The mirror assembly security system in claim 192, wherein said mating surface configurations comprise at least one pair of deflectable prongs on one of said exterior mirror assembly and said enclosure and a socket on the other of said exterior mirror assembly and

Applicants : Todd W. Pastrick et al.  
Page : 19

said enclosure, said deflectable prongs snap-fitting with said socket.

195. (new) The mirror assembly security system in claim 192, wherein said mating surface configurations include at least one guide member and a deflectable clip on one of said exterior mirror assembly and said enclosure and a doghouse connector on the other of said exterior mirror assembly and said enclosure, said guide member and clip being retained by said doghouse connector.

196. (new) The mirror assembly security system in claim 185, wherein said enclosure is made from a heat-resistant polymer.

197. (new) The mirror assembly security system of claim 196, wherein said polymer has a heat distortion temperature of at least approximately 80°C.

198. (new) The mirror assembly security system in claim 196, wherein said polymer is selected from the group consisting of polycarbonate, polyester, nylon, and ABS.

199. (new) The mirror assembly security system in claim 191, wherein said light-directing surface comprises a metallic reflector surface.

200. (new) The mirror assembly security system of claim 184, wherein said exterior mirror assembly comprises a driver-side exterior mirror assembly.

201. (new) The mirror assembly security system of claim 185, wherein said reflective element comprises an electro-optic mirror.

202. (new) The mirror assembly security system of claim 201, wherein said electro-optic mirror comprises an electrochromic mirror.

203. (new) The mirror assembly security system of claim 202, wherein said electrochromic mirror comprises an electrochemichromic mirror.

204. (new) The mirror assembly security system of claim 186, wherein said sealing means comprises a polymer material having a durometer hardness of at least about 50 SHORE A.

205. (new) The mirror assembly security system of claim 204, wherein said sealing means comprises a polymer material having a durometer hardness in a range of from about 50 to about 95 SHORE A.

206. (new) The mirror assembly system of claim 186, wherein said socket is at least partially formed of a resilient polymer material so as to be self-gasketing at its mating surface to said first enclosure.

207. (new) The mirror assembly security system of claim 184, wherein said light module is inserted within said exterior mirror assembly through an opening in said bottom portion of said exterior mirror assembly.

208. (new) The mirror assembly security system of claim 207, wherein said light module is positioned within said exterior mirror assembly in a manner that conforms to the styling and aerodynamic lines of said exterior mirror assembly.

209. (new) The mirror assembly security system of claim 185, wherein said light module is inserted within said exterior mirror assembly through an opening in said bottom portion of said exterior mirror assembly.

210. (new) The mirror assembly security system of claim 209, wherein said exterior mirror assembly includes a wall, said cover of said light module being substantially flush with said wall of said exterior mirror assembly.

211. (new) The mirror assembly security system of claim 209, wherein said light module is removably attached by an attachment system.



Applicants : Todd W. Pastrick et al.  
Page : 21

212. (new) The mirror assembly security system of claim 211, wherein said attachment system comprises a fastenerless system.

213. (new) The mirror assembly security system of claim 212, wherein said fastenerless system comprises a doghouse style receiving connector.

214. (new) The exterior rearview mirror system of claim 209, wherein said light module is removably attached using at least one fastener.

215. (new) The exterior rearview mirror system of claim 214, wherein said at least one fastener comprises a member selected from the group consisting of a screw, a clasp, a latch, and a clip.

216. (new) The exterior rearview mirror system of claim 214, wherein said at least one fastener comprises a screw.

217. (new) The exterior rearview mirror system of claim 211, wherein said light module is removably attached using no more than two fasteners.

218. (new) The exterior rearview mirror system of claim 217, wherein said no more than two fasteners are selected from the group consisting of screws, clasps, latches, and clips.

219. (new) The exterior rearview mirror system of claim 217, wherein said no more than two fasteners comprise at least one screw.

220. (new) The exterior rearview mirror system of claim 219, wherein said no more than two fasteners comprise two screws.

221. (new) The mirror assembly security system of claim 185, wherein said light module is inserted within said exterior mirror assembly through an opening in said bottom portion of said exterior mirror assembly.

222. (new) The mirror assembly security system of claim 221, wherein said exterior mirror assembly includes a wall, said cover of said light module being substantially flush with said wall of said exterior mirror assembly.

223. (new) The mirror assembly security system of claim 184, wherein said enclosure includes first and second side walls and first and second electrical contacts, said first contact disposed on said first side wall, said second contact disposed on said second side wall and said contacts supporting said light source and for electrically coupling said light source to an external electrical power supply.

224. (new) The mirror assembly security system of claim 223, wherein said light source comprises an elongated light radiating surface.

225. (new) The mirror assembly security system of claim 223, wherein said light source comprises an incandescent light source.

226. (new) The mirror assembly security system of claim 225, wherein said light source comprises an incandescent festoon light source.

227. (new) The mirror assembly security system of claim 184, wherein said enclosure has a volume that is less than approximately 70 cubic centimeters.

228. (new) The mirror assembly security system of claim 185, wherein said enclosure has a volume that is less than approximately 50 cubic centimeters.

229. (new) The mirror assembly security system of claim 185, wherein said ground area is illuminated with a light level less than approximately 40 lux.

230. (new) The mirror assembly security system of claim 184, wherein said ground area is illuminated with a light level greater than approximately 10 lux.

Applicants : Todd W. Pastrick et al.  
Page : 23

231. (new) The mirror assembly security system of claim 230, wherein said ground area is illuminated with a light level in the range of approximately 10 lux to approximately 40 lux.